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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,160	08/31/2005	Bernard Buathier	BASF.10033	8322
45473 7590 01/15/2008 HUTCHISON LAW GROUP PLLC PO BOX 31686 RALEIGH, NC 27612			EXAMINER CUTLIFF, YATE KAI RENE	
			ART UNIT	PAPER NUMBER
			1621	
			MAIL DATE	DELIVERY MODE
			01/15/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/532,160

**Applicant(s)**

BUATHIER ET AL.

**Examiner**

Yate' K. Cutliff

**Art Unit**

1621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in France (FR 0213392) on October 25, 2002.
2. Amendment to the title is acknowledged.
3. Applicant's arguments, see Amendment, filed November 15, 2007, with respect to the rejection(s) of claim(s) 1-12 under 35 USC §103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Kempf et al. (U.S. 6,747,175) as set out below.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kempf et al (U.S. 6,747,175).

The rejected claims cover, inter alia, a process for preparing a aniline derivative of formula (I) by the reaction of formula (11) with a dihalogen X<sub>2</sub>, and by introducing the two compounds simultaneously into a polar aprotic solvent in a dihalogen to compound of formula (11) ration ranging from 1.9 to 2.5 and at a temperature ranging from 100 to 300°C. Further, in claim 2 Applicant defines formula (I). as 2,6-dichloro-para-trifluoromethylaniline. In claims 3 and 4 the solvent used in claim 1 is a chlorinated

aliphatic solvent subsequently defined as dichloroethane. In claims 5 and 6 the solvent as a chlorinated aromatic solvent subsequently defined as monochlorobenzene.

Claims 7-10 further limits the temperature and molar ranges. Lastly, in claims 11 and 12 the solvent used in the process of claim 2 is either a chlorinated aliphatic solvent or chlorinated aromatic solvent.

Kempf et al. discloses a method of chlorinating aniline. Applicant is directed to the discussion of Kempf et al. in the Office Action of July 19, 2007. Further, Kempf et al. discloses a process of synthesis of aniline which is chlorinated on the ring which comprises at least one carbon atom of the  $sp^3$  hybridization which is both prehalogenated and the carrier of a fluorine atom. (see column 1, lines 61 - 66). Basically, Kempf et al. discloses all of the process features of the claimed invention. In Kempf et al. the reactants include a para-trifluoromethylaniline, chlorine ( $Cl_2$ ) and monochlorobenzene (polar aprotic solvent). (see Example 1 results table, Test No. 3). Also, in Kempf et al. the substrate and the chlorine are introduced gradually and simultaneously over a heel of solvent or of reaction mass. (see column 3, lines 6-9).

The difference between Applicant's claimed process and Kempf et al, is that in Kempf et al. the para-trifluoromethylaniline is introduced into the reaction in a hydrofluoric acid medium versus the neutral medium of the Applicant's claimed process. However, Kempf et al. states that its chlorination reaction is carried out on para-trifluoromethylaniline **freed** from its hydrofluoric acid. (see column 4, lines 8-10).

Applicant's claimed steps merely omit the use of an acid medium in its process for the dichlorination of the para-trifluoromethylaniline. The rational to omit this step is

implied by Kempf et al. when it is disclosed that in the process of Kempf et al. chlorination of the para-trifluoromethylaniline is carried out once the para-trifluoromethylaniline was freed from the hydrofluoric acid.

It is known in the art that para-trifluoromethylaniline can be dichlorinated.

In light of the fact that chlorination was effected after the para-trifluoromethylaniline was freed from the hydrofluoric acid in the process of Kempf et al., it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to conduct the reaction process using just para-trifluoromethylaniline and chlorine in the monochlorobenzene (polar aprotic solvent) in a desire to increase the yield of the 2,6-dichloro-para-trifluoromethylaniline.

Based on the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a). From the teachings of the references, it is apparent that one of ordinary skill in the art has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common senses. In this instance the fact that a combination was obvious to try might show that it was obvious under §103, KSR, 550 U.S. at \_\_\_, 82 USPQ2d at 1397.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yate' K. Cutliff whose telephone number is (571) 272-9067. The examiner can normally be reached on M-TH 8:30 a.m. - 5:00 p.m.


Application/Control Number:  
10/532,160  
Art Unit: 1621

Page 5

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler can be reached on (571) 272 - 0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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